## REMARKS

Claims 1, 3, 6, 8, 10 - 11, 13 - 14, 16, 20 - 21, and 24 have been amended. Claims 26 - 27 have been added. No new matter has been introduced with these amendments or added claims, all of which are supported in the application as originally filed. Claims 2 and 4 have been cancelled from the application without prejudice (and Claims 22 - 23 were previously cancelled from the application without prejudice). Claims 1, 3, 5 - 21, and 24 - 27 are now in the application.

Applicants are <u>not</u> conceding that the subject matter encompassed by the claims as presented prior to this Amendment is not patentable over the art cited by the Examiner, and claim amendments and cancellations in the present application are directed toward facilitating expeditious prosecution of the application and allowance of the currently-presented claims at an early date. Applicants respectfully reserve the right to pursue claims, including the subject matter encompassed by the claims as presented prior to this Amendment and additional claims, in one or more continuing applications.

## Rejections under 35 U. S. C. §103(a)

Page 6 of the Office Action dated December 26, 2008 (hereinafter, the Office Action) states that Claims 1 - 4, 7 - 17, 21 and 24 - 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Crow, "Customer-Focused Development with QFD" (hereinafter Crow). Page 11 of the Office Action states that Claims 5 - 6 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Crow in view of U. S. Patent Publication 2004/0068456 to Korisch.

Page 13 of the Office Action states that Claims 18 - 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Crow in view of Lowe, "QFD in New Product Technology Evaluation" (hereinafter, "Lowe"). Claims 2 and 4 have been cancelled from the application without prejudice, rendering the rejections moot as to those claims. The rejections are respectfully traversed with regard to the remaining claims as currently presented.

The first element of independent Claim 1 recites "determining a plurality of criteria that are important to a target market, and at least one attribute to be used for measuring each of the criteria". In other words, each of the criteria has at least one attribute, and the attribute is used for measuring that criteria. Relative to this claim language, the Office Action cites the Introduction on p. 1 of Crow and the House of Quality figure on page 4 of Crow. In addition, page 3 of the Office Action indicates that Crow's "Customer Requirements" from the House of Quality figure are deemed to be equivalent to Applicants' criteria. Page 3 of the Office Action also indicates that Crow's "Product Design Requirements" are deemed to be equivalent to Applicants' attributes (and this is also stated on page 4 of the Office Action under the "Argument C" discussion). Applicants respectfully disagree with this analysis of Crow, as will now be discussed

Applicants respectfully submit that Crow's <u>Customer Requirements</u> and <u>Product Design Requirements</u> cannot be equated to Applicants' <u>criteria</u> and <u>attributes</u>, because the Product Design Requirements are <u>not used to measure</u> the Customer Requirements. (Instead, the Product Design Requirements are apparently just another type of requirements, which might then be

another type of <u>criteria</u> if the Customer Requirements are deemed to be <u>criteria</u>.) Refer to page 6 of Crow for text supporting this position of Applicants. In particular, see the text stating

With a more complex product, if one hundred potential [customer] needs or requirements were identified, and these were translated into an equal or even greater number of product [design] requirements or technical characteristics<sup>1</sup> [i.e., at least 100 product design requirements], there would be more than 10,000 notential relationships...(emphasis added)

In other words, Crow is indicating that the 100 customer requirements are each paired with each of the 100 product design requirements, thereby creating 100 times 100 (i.e., 10,000) relationships. His House of Quality figure therefore contains a grid having a box for recording the strength of each of these relationships. See the symbols in the House of Quality figure, which are matched to the legend that is titled "Relationships".

See also Section 3.2 of Lowe, which is also discussing the "QFD" process discussed by Crow. Paragraph 1 in Section 3.2 of Lowe states, in its last sentence, "Numbers or symbol are commonly used in QFD to represent the <u>strength</u> of such an <u>interrelationship</u> [as represented in the cells of an "HOQ", or House of Quality, matrix such as Crow's figure on page 4]" (emphasis added). See also the second sentence in Paragraph 2 of Section 3.2, of Lowe, which states "An overall value for the '<u>importance of the strength</u>' of a particular <u>interrelationship</u> can then be numerically calculated ..." (emphasis added). Thus, it is clear that a <u>House of Quality</u> matrix is used in QFD for illustrating <u>strength</u> of relationships.

<sup>&</sup>lt;sup>1</sup> See also page 4 of Crow, numbered item 4, which uses the term "product requirements or technical characteristics" as a synonym for the "Product Design Reqmts" when discussing the <u>relationship</u> with customer requirements that is depicted in the House of Quality figure.

Referring by way of example to some of the entries in Crow's House of Quality figure on page 4, it can be seen that Crow has assigned a "Strong relationship" symbol (i.e., a circle with a black dot inside) to represent the relationship between "Max. Weight 160 lbs." (which is a Customer Requirement) and "Low APU weight" (which is a Product Design requirement), and he has also assigned this "Strong relationship" symbol to represent the relationship between "Max. Weight 160 lbs." (which, again, is a Customer Requirement) and "Lightweight containment ring" (which is a Product Design requirement). However, "Low APU weight" is not usable for "measuring" whether something has a Maximum Weight of 160 pounds. Similarly, "Lightweight containment ring" is not usable for "measuring" whether something has a Maximum Weight of 160 pounds.

In view of the above, Applicants respectfully submit that Crow does not teach the first claim element as recited on lines 3 - 4 of Claim 1.

Applicants have amended Claim 1 herein to clarify the claim language pertaining to the product assessment score and the increase to that score ("product assessment score increase"). For each of the attributes used for computing the product assessment score, if the assigned attribute value for that attribute falls below a threshold value, then the "product assessment score increase" is recomputed by replacing the assigned attribute value with the threshold value. With reference to the sample results in Applicants' Fig. 9, for example, the assessed "Product XYZ" has received a product assessment score of 87.65% (see reference number 910). A "Complete Software Solution" attribute 921 has received a score (or "assigned attribute value") of 2. The

threshold value, however, is 3.<sup>2</sup> Thus, the assigned attribute value for this attribute 921 "falls below a threshold value". Accordingly, a computation is performed to determine what the product assessment score for Product XYZ would be if attribute 921 had received a value of 3 instead of the value of 2. This is stated in Fig. 9 as "Impact to score if brought to minimum", and this impact ("product assessment score increase") is shown in Fig. 9 as .67%.<sup>3</sup>

Applicants respectfully submit that the references do not teach, or suggest, this "...

programmatically computing a product assessment score increase ... comprising recomputing the product assessment score ... using the threshold value as a replacement ...".

Applicants note that the Office Action admits that Crow "is not expressly clear on threshold values". Office Action, page 8. The Office Action then states that "Crow discloses gap analysis and benchmarking". The Office Action also states, with regard to raising an assigned attribute value to the threshold, "... if a value is raised to a certain threshold, one can see how this change will reflect in the product's overall assessment score". Office Action, pages 7 - 8. This "one can see" assertion is also presented on page 5 of the Office Action, referring to the Concept Selection Matrix on page 7 of Crow, and the Office Action also states on pages 5 - 6 that it was well-known to perform a "change impact analysis to determine the effects of changes on an overall system ...". Page 5 of the Office Action also states that the Examiner takes Official Notice

<sup>&</sup>lt;sup>2</sup> See Specification, p. 29, paragraph that begins "A summary 920 is provided ...". As stated therein, the "minimum acceptable score" for the attributes is preferably "a 3 on [a] 5-point scale".

<sup>3</sup> Id.

that "gap analysis was well-known" and that "gap analysis technique meets the claimed limitations", such that one of ordinary skill in the art would have "employ[ed] gap analysis to improve the attributes (and ultimately, the products) of Crow". Applicants respectfully disagree with these assertions, as will now be discussed.

Applicants respectfully note that the cited page 7 of Crow states that "If the product concept does <u>not satisfy the criteria</u>, the column is <u>left blank</u>." (emphasis added). There is <u>no suggestion</u> of using a different value/score for that criteria and then recomputing the product assessment score. Crow continues on page 7 by stating

For each <u>blank or weak</u> symbol ... <u>other concept approaches</u> with strong or moderate symbols for that criteria <u>are reviewed</u> to <u>see if a new approach can be synthesized</u> by <u>borrowing part of another concept approach</u> to improve on the preferred approach. (emphasis added)

In other words, Crow appears to suggest some type of substitution of one concept for another when the results are unsatisfactory. This is quite different from Applicants' recited "... recomputing the product assessment score ...".

Applicants also find a discussion of "gap" on page 4 of Crow, stating "Where does the gap need to be closed and how can this be done – copying the competition or using a new approach to technology?" Clearly, neither of Crow's suggested solutions of "copying the competition" or "using a new approach to technology" can be equated to Applicants' recited "... recomputing the

<sup>&</sup>lt;sup>4</sup> noting that the Office Action is interpreting "criteria" in this usage as being equated to Applicants' "attributes".

product assessment score ...".

Thus, Applicants respectfully submit that nothing in Crow teaches, or suggests, their claim language as presently recited on lines 13 - 18 of Claim 1.

With regard to the Office Action assertion that "one can see how this change impacts" a product assessment score, Applicants respectfully submit that the Office Action is using <a href="hindsight">hindsight</a> reconstruction to read into the references teachings which are simply not there. This is impermissible. See the Court of Appeals for the Federal Circuit holding from *In re Fritch*, 23 USPO 2d 1780, 1784 (Fed. Cir. 1992), stating

It is <u>impermissible</u> to use the claimed invention as an instruction manual or "template" to <u>piece together the teachings</u> of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use <u>hindsight reconstruction</u> to <u>piek and choose</u> among isolated disclosures in the prior art to deprecate the claimed invention." (quoting In re Fine, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988)). (emphasis added)

as well as the holding from Akzo N.V. v. United States International Trade Commission, 1
USPQ 2d 1241, 1246 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987), which stated

[P]rior art references before the tribunal must be read as a whole and consideration must be given where the references diverge and teach away from the claimed invention. Moreover, [one] cannot pick and choose among individual parts of assorted prior art references "as a mosaic to recreate a facsimile of the claimed invention." (emphasis added)

In addition, Applicants hereby request that the Examiner provide an affidavit under 37 CFR 1.104(d)(2) to support the Office Action assertions that it would be obvious to employ a "change impact analysis" with Crow's technique; that it would be obvious to "employ gap

analysis"; and that it was obvious that "one can see how this change impacts the product's overall assessment score".

Applicants also respectfully submit that neither Korisch nor Lowe cures the abovediscussed defects of Crow. In addition, Applicants note that Korisch is directed toward
techniques for designing a stock market portfolio, and that the cited text in paragraph [0154],
lines 19 - 25 pertains to iteratively selecting the stocks that make up the portfolio. Applicants
respectfully submit that this is not relevant to their claim language, and that one of skill in the art
would not, in fact, be motivated to consult the teachings of Korisch when attempting to solve the
problem to which their claims are directed. Therefore, Applicants respectfully submit that the
references cannot be combined to render Claim 1 obvious (assuming, arguendo, that such
combination could be made and that one of skill in the art would be motivated to attempt it).

In view of the above, Applicants respectfully submit that their independent Claim 1 is patentable over the cited references. Independent Claims 14 and 24, as well as newly-added independent Claims 26 - 27, recite claim language similar to that of Claim 1, and these claims are therefore deemed patentable by the same arguments presented above with regard to Claim 1.

Dependent Claims 3, 5 - 13, 15 - 21, and 25 are therefore deemed patentable by virtue of, *inter alia*, the patentability of the independent claims from which they depend.

The Examiner is therefore respectfully requested to withdraw the §103 rejections of all claims as currently presented.

## II. Conclusion

Applicants respectfully request reconsideration of the pending rejected claims, withdrawal of all presently outstanding rejections, and allowance of all remaining claims at an early date.

Respectfully submitted,

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